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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,932	12/12/2003	Chi Fai Ho	IPLN.P0001C	2247
7590 Peter Tong 1807 Limetree Lane Mountain View, CA 94040			EXAMINER LEIVA, FRANK M	
			ART UNIT 3714	PAPER NUMBER
			MAIL DATE 08/19/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/734,932	Applicant(s) HO ET AL.	
	Examiner FRANK M. LEIVA	Art Unit 3714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 47-68 is/are pending in the application.
- 4a) Of the above claim(s) 52, 59, 61, 65 and 67 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 47-51, 53-58, 60, 62-64, 66 and 68 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 February 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>02/17/2009; 05/18/2009</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Acknowledgements

1. The examiner acknowledges amendments to the specification and drawings, finds no amendments to the claims in applicant's submission 03 February 2009.

Response to Arguments

2. Applicant's arguments filed 03 February 2009 have been fully considered but they are not persuasive.
3. Applicant's traversal is on the ground(s) that the restriction is not necessary and/or not proper is acknowledged. This is not found persuasive because the restrictions of claims 52, 55, 59, 61, 65 and 67, the burden for the examiner for searching the claims is as follows.

Claims 52, 59 and 65 are directed to the creation of study materials not the displaying of materials already in file. This entails an immense algorithm for the construction of study materials.

Claim 61 is directed to the selection of study materials dependent on how long ago the user accessed the previous materials, that is not part of the review process.

Claims 55 and 67 are directed to the comparison or grading of multiple users to select materials to present to another user, not part of a review process. The requirement is still deemed proper and is therefore made FINAL.

4. Regarding the argument on page 10 of applicant's remarks; *"MC&S does not teach or suggest determining, based on at least 2 rules having a conflict in view of an assessment of the user, which additional materials to present to the user"*, the examiner points to page 12 "Student report" where the students performance is rated upon several rules (e.g. number of exercises the students has correctly answered, the number of exercises incorrectly answered, or the number of exercises answered using the help resources), as explained in

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page 1 bottom paragraph the students are helped in individualized manner according to their rating and the material for review is presented in a manner according to their understanding of the material.

5. Regarding the argument on page 11 of applicant's remarks; "*MC&S d w teach or suggest rule having a conflict in view of an assessment of the user*" the examiner points to the definition of solving a conflict in computer language as the Boolean expression the will give an output according to the hierarchy of defined rules, and that if the defined hierarchies collide, the system would crash. Thus solving a Boolean expression to decide the next lesson to view or review will always produce a result unless the system is faulty. Resolving conflicting rules is just resorting to a secondary set of rules to accommodate a different set of hierarchy. Conflicting rules will always have an overwriting failsafe for decision making or request help from the program operator.

6. Regarding the argument on page 12 of applicant's remarks; "*MC&S does not teach or suggest having the conflict resolved to determine which additional materials to present to the user*", the examiner points to page 25 of MC&S (A sample Course Report) second paragraph, showing all the data used in calculating (assessing) the review quotient that will indicate the probability the student will receive review exercises in the next session, the rules are navigated (conflict resolved) and the determination is made.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. **Claims 47-51, 53-54, 56-58, 60, 62-64, 66 and 68** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. Independent claim 47, 57 and 63 has mention of "at least two rules" without a descriptive mentioning of what they are, thus making the claims indefinite. It is unclear as to what and how the at least two rules "having a conflict in view of an assessment of the

user". It is thus impossible to have a proper understanding of the invention as claimed and provide appropriate interpretations therefor.

Claim Rejections - 35 USC § 101

10. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

11. **Claims 47-51, 53-54, 56-58, 60, 62-64, 66 and 68** are rejected under 35 USC 101 as being directed to non-statutory subject matter because these are method or process claims that do not transform underlying subject matter (such as an article or materials) to a different state or thing, nor are they tied to another statutory class (such as a particular machine). See *Diamond v. Diehr*, 450 U.S. 175, 184 (1981) (quoting *Benson*, 409 U.S. at 70); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978) (citing *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876)). See also *In re Bilski* (Fed Cir. 2007-1 130. 1013012008) where the Fed. Cir. held that method claims must pass the "machine-or- transformation test" in order to be eligible for patent protection under 35 USC 101.

Based on Supreme Court precedent and recent Federal Circuit decisions, a 101 process must (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. If neither of these requirements is met by the claim, the method is not a patent eligible process under 35 USC 101 and should be rejected as being directed to non-statutory subject matter. An example of a method claim that would not qualify as a statutory process would be a claim that recited purely mental steps. Thus, to qualify as a 35 USC 101 statutory process, the claim should positively recite the other statutory class (the thing or product) to which it is tied, for example by identifying the apparatus that accomplishes the method steps, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

In its recent case, *In re Bilski, et al.*, the Court of Appeals for the Federal Circuit determined that in order to meet the requirements of 35 U.S.C. § 101, method claims must either recite a method of making a physical transformation on a material substance or be explicitly tied to some machine or article of manufacture. The instant claims 47-68 do not meet the criteria set forth in the "machine-or-transformation test" as they are not tied to another specific statutory class. The claims themselves amount to "determination of study materials to present" and "allowing the user to access materials".

Such process steps lack any tangibility or transformation of any article or materials. The state of the physical device is not conveyed as changing or being modified from the process steps listed. Therefore the instant claims fail to meet the standard set forth by *In re Bilski* and do not pass the "machine- or-transformation test".

The Court in *Bilski* clearly states that the claims that preempt substantially all uses of a fundamental principle are not drawn to patent eligible subject matter.

As such claims 47-68 are held to be directed towards unpatentable subject matter.

Claim Rejections - 35 USC § 103

12. Claims 47-51, 53-54, 56-58, 60, 62-64, 66 and 68 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Success Maker Math Concepts and Skills, Teacher's Handbook, Curriculum Corporation, February 1993 hereinafter MC&S.

13. Regarding claims 47, 57 and 63; MC&S discloses a computer-implemented method and readable memory for helping a user learn, the method comprising:

allowing the user to access materials related to a subject to help the user learn, (page 7);

determining, based on at least two rules (number of exercises the students has correctly answered, the number of exercises incorrectly answered, or the number of exercises answered using the help resources) (p. 12; ¶ 4), which additional materials to present to the user, after the materials accessed by the user at (a) have been presented to the user, with the at least two rules having a conflict in view of an assessment of the user,

and with the conflict resolved to determine which additional materials to present to the user (page 7; Presentation of Strands) the Presentation of Strands where materials are presented according to the students grade level which is dependent on the difficulty rating rules of page 12; ¶ 4, discussed above; and

selecting least some of the materials accessed by the user at (a) for presentation to the user for a further time so that the user's memory on the materials can be refreshed, (Page 25; ¶ 3), receive review exercises in the next session.

MC&S fails to disclose a conflict upon the rules that governed the selection of the next material of study because computer algorithms cannot encounter conflicting parameters; there is always a second set of rules to follow if the program encounters an impasse. "If then else" statements always have a way out and conflicting data always has another direction to take as is in the applicant's disclosure.

14. Regarding claim 48; MC&S discloses wherein at (c) the selecting of at least some of the materials accessed by the user at (a) for presentation to the user for the further time occurs after the additional materials determined at (b) have been presented to the user, (page 25), "Sam will receive review exercises in the next session".

15. Regarding claim 49; MC&S discloses wherein the method further comprises having at least some of the accessed materials transmitted via a network to a device to be presented to the user, and wherein the network includes a private network and a public network, (page 162; ¶ 1), computer system, management system.

16. Regarding claim 51; MC&S discloses wherein the at least some of the materials accessed by the user at (a) can be repeatedly selected for presentation to the user, but if the time elapsed is more than a predetermined duration of time, the at least some of the materials accessed by the user at (a) are no longer selected, (table 2), system will no longer repeat subject after all available tries have been presented.

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17. Regarding claim 53; MC&S discloses wherein the at least some of the materials accessed by the user at (a) can be repeatedly selected for presentation to the user, (page 30 and table 2).

18. Regarding claims 54, 60 and 68; MC&S discloses wherein the additional materials determined to be presented to the user at (b), also relate to the subject, (table 1), shows the lessons being of the same subject (math).

19. Regarding claims 56, 62 and 66; MC&S discloses wherein resolving the conflict between the at least two rules involves favoring one of the rules over another one of the rules, (table 2), showing a set of rules with a hierarchy.

20. Regarding claims 50, 58 and 64; MC&S discloses all the limitations of claims 47, 57 and 63 as applied above, yet is silent on triggers that would tag the lessons for review. Whereas Kerwin discloses wherein the at least some of the materials accessed by the user at (a) are selected at (c) for presentation to the user for the further time depending on a time elapsed from when the user accesses the materials at (a), (col. 4:63 – col. 5:3), suggest that the number of repetitions is calculated by the system by having certain requirements, as is also mentioned by MC&S there is a determination of delaying certain repetitions for reinforcement. A person of ordinary skill in the art upon reading Kerwin would also have recognized that there are a limited number of triggers that could be used to determine the scheduling of the repeated subjects, including but not limited to the already disclosed difficulty levels, skill level attained, criticality of the subject in order to continue to next level or time elapsed since last reviewed. Thus it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to try any number of permutations of triggers in the creation of the scheduled repetitions, in as much as the fact that the system would inherently require a trigger in order to place the repetition in the scheduled studies. Not only a trigger is necessary but it would create the predictable result of delaying the review of the materials to a later time.

Examiner's Note

21. Examiner has cited paragraphs and figures in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRANK M. LEIVA whose telephone number is (571)272-2460. The examiner can normally be reached on M-Th 9:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter D. Vo can be reached on (571) 272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

FML

08/03/2009

/Peter D. Vo/

Supervisory Patent Examiner, Art Unit 3714

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